

## Math 1030-90, Spring 2018 Syllabus

Note: Many of the links in the syllabus are to this class's Canvas page, which will be available to registered students on the first day of the semester.

### **INSTRUCTOR INFORMATION:**

Instructor: Anna Schoening

Office: JWB 121

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**COMMUNICATION:** You may contact me by e-mail or through Canvas-mail. When e-mailing, please include "math 1030" in the subject line. All announcements for the course will either be posted in quiz format on the Canvas website (these are graded) or sent by Canvas-mail.

**OFFICE HOURS:** Tuesdays 10:30-11:30 am, Wednesdays 1-2 pm, or by appointment. There will also be an online office hour, time TBD.

No appointment is necessary to come to office hours. If the office hour times are inconvenient, please contact me to set up an appointment.

### **COURSE OBJECTIVES:**

Upon successful completion of this course, a student should be able to:

1. Use Venn diagrams to examine relationships between sets and the validity of simple deductive arguments.
2. Use an appropriate sentence to describe both the absolute and percent change in a given quantity and interpret such statements about the change.
3. Use simple and compound units, making conversions when necessary, and develop accurate comparisons between units.
4. Evaluate the impact of compound interest on simple financial decisions.
5. Use the savings plan and loan formulas to calculate the payment amount into the savings plan when a certain financial goal needs to be achieved, to calculate the mortgage payment or interest paid over the life of the loan and discuss whether those results are realistic (or not), compare several loans with different interest rates in order to financial decisions.
6. Compare and illustrate the features of linear and exponential growth using practical examples.
7. Determine simple areas, volumes, and explain the differential effect of scaling on perimeter, area, volume as well as some of the practical implications of scaling.

**PREREQUISITES:**

The prerequisite for this course is at least a C in mathematics 980 or 1010, or an Accuplacer (EA) score of 60 or better, or ACT math score of 19 or better, or SAT math score of 500 or better. Students are expected to already have basic algebra skills.

*Important Note:* The mathematics department DOES enforce prerequisites for all undergraduate courses. If you were able to register for this class based on your enrollment in the prerequisite course last semester and you did not receive the minimum grade in that course to enter this class, then you will be dropped from this class on Friday of the first week of classes. If you are in this situation, it is in your best interest to drop yourself from this class and enroll in a class for which you have the prerequisites before you are forcibly dropped.

**TEXT:**

ISBN-10: 1-269-74850-5

ISBN-13: 978-1-269-74850-6

**Using & Understanding Mathematics, A Quantitative Reasoning Approach**, by Bennett and Briggs, Custom edition for University of Utah (taken from 6th edition)

*\*\* Either 6th edition of the full text or custom 3rd edition is fine.*

This textbook has been in print for many years. Cheaper copies can often be found online. Students often ask if the textbook is necessary. My response and additional information about how to get the textbook can be found here: [A: Textbook](#)

**ONLINE MATERIALS:**

Materials for this course can be found on TWO websites:

- Canvas <https://utah.instructure.com/> It is a good idea to save this address, so that you can get to Canvas without going through CIS. Usually once or twice a term, CIS goes down, so the alternative access is useful.
- WebWork (link TBD): This is the homework website. You will receive an e-mail with your login name and password on the first day of class or, if you registered after the first day of the semester, within two business days. It is sent to your U-mail address. If you do not check U-mail regularly, forward this to an address that you do check.

**TECHNOLOGY:**

Some of the course work can be done without a calculator (if you are curious about a particular problem, just ask). However, in order to focus on algebra and not arithmetic, four-function and scientific calculators are allowed, both for homework and exams. On exams, calculators on phones and graphing calculators are NOT allowed.

## **HELP:**

Contacting me by my e-mail, coming into office hours, or setting up an appointment is the first way to get help. I am happy to talk about individual problems, mathematical concepts, or help you make a study/learning plan. Please seek help early in the term, or as issues arise.

If you have a question about a WeBWorK problem, you can contact me through WeBWorK (good if it's a formatting question) or look/post in the Canvas discussion board (good for content questions/ calculation issues).

You can also get tutoring through the following:

- Math Tutoring Center (drop-in tutoring and computer lab). This is free to all students. It is in the underground passage between JWB and LCB, Room 155B. See <http://www.math.utah.edu/ugrad/mathcenter.html> for hours.
- Private Tutoring: University Tutoring Services, 330 SSB (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB 233.

## **THE STRUCTURE OF THE COURSE:**

This is an online course, but still an intense course. According to the University of Utah, a 3-unit course should have about 3 hours of lecture and 6-9 hours of outside study/homework time. This means that our online course will take the average student about 9-12 hours per week. Some students will be able to get by on less, and some students will need more.

Each week we cover specific sections. You can choose when you work on the material in the week (as long as you meet deadlines), but you can't complete the course at your own pace. There is weekly online homework and weekly online quizzes. All materials can be found in the modules on Canvas, except the weekly homework, which is found at WeBWork. There will be two midterms, which you will take at the testing center or with a proctor. At the end of the semester, there is a comprehensive final exam. All the Math 1030 students are given the same exam at the same time. If you cannot take the exam at that time, you can arrange to take an alternate exam earlier.

Here is a breakdown of the components in the course and what they are worth.

- **Reading Announcements on Canvas.** Course documents and announcements are given in quiz format and have a short quiz about the content at the end. These "quizzes" begin with "A:..." Completing these is worth 6% of your grade. Suggested due dates are shown, but these can be completed at any time before the final exam.
- **Reading** from your **text book.** Reading the textbook will give you a better understanding of the material, and show you more examples than you will see in the lecture videos.
- **Watching the video lectures.** They are available through the modules or in both streamable and downloadable versions at <http://www.math.utah.edu/lectures/math1030.html> ([Links to an external site.](#)). (It's good to save this address, in case Canvas is down)

- Working through the assigned **textbook problems**. These are not graded, but help students build a foundation for doing the more challenging WeBWork problems. And, they also prepare students for exams.
- There are **graded homework problems on WeBWork**, due Monday nights at 11:59 pm; worth 10% of grade; the two lowest scores will be dropped in the grade calculation in the last week of class.
- **Feedback Quizzes:** These are given weekly on Canvas; the time limit is 30-40 minutes and there is no pausing; quizzes can be begun between 1 am on Friday and must be submitted by 11:59 pm on Tuesday. They are worth 12% of the grade; the two lowest quiz scores will be dropped in the grade calculation in the last teaching week of the semester.

When you finish a quiz, all you will see is your score. On Wednesday mornings, the quiz will be unlocked so that you can see your answers and the Canvas key answers. Solutions will also be posted. On Wednesday and Thursday, you should review your quiz and request retroactive partial credit, if appropriate. Find out more information about quizzes here: [A: Quizzes](#).

- **Project:** The project assignment will be posted by the second week of classes and due on Monday, April 9. There are absolutely no extensions of the deadline for any reason. The project is worth 12% of your grade. This project is intended to be an in-depth exercise implementing some of the mathematics of the course that will benefit you in your adult life.
- **Exams:** There are two midterm exams, worth 15% each. You must schedule Exam 1 and 2 using SmarterProctoring (click on Schedule Exams in canvas). Exams will be administered at the Uonline testing center (in the Marriot Library), at a satellite testing center (in Sandy), or, if you are out of area, with a proctor that you set up and register with Uonline. There will be practice material provided prior to each exam. You are allowed a scientific calculator on exams. More information about exams, including how to set up a proctor, can be found here [A: Exams](#).
- **Common Final:** The final is comprehensive and worth 30% of your grade. All the students of Math 1030 at the University of Utah take the same common final. The date is Wednesday, May 2, from 3:30-5:30 pm. It will be on the main campus. The exact room will be announced later in the term and communicated to you through the course announcements. If you are unable to be at the common final, due to the time or location, or you are an out of area student, you can arrange to take the exam at the testing center at a day/time EARLIER than the common final.
- **Pre-test:** There is a pre-test which can be taken in either Week 2 or Week 3 of the semester. The pre-test is optional, and you are not graded based on your performance. We use your pre-test, in conjunction with the final, to measure what you learn in this course. If you take it, it will count as a quiz on which you earn 100%. If you do not take it, then you will get a 0 for it, but your three lowest quiz grades will be dropped to mitigate the effect of this. You will need to register for it with SmarterProctoring, just as you would for an exam.

## **IS ONLINE RIGHT FOR YOU?**

Before committing to this course, consider whether the online format matches your learning style. To aid in this, please look at: [A: Online?](#)

## **DATES:**

Weekly Due Dates:

- WebWork HW due each Monday at 11:59pm
- Online Quiz each Friday to Tuesday; due Tuesday at 11:59pm, including exam weeks

Exams (Schedule at a time between the dates below):

- Pretest: Week 2 or 3: January 15 to January 27
- Exam 1: Week 6: February 12 to February 17
- Exam 2: Week 13: April 2 to April 7
- Final: There are two options:
  - Departmental Final (on-campus, location TBA): Wednesday, May 2, 3:30-5:30 pm
  - Alternate Final (for those who aren't local, or can't make the departmental final): April 26 to May 1

Other dates:

- Project Due Date: Monday, 4/9
- Drop date: Friday, 1/19
- Withdraw/audit date: Friday, 3/2